

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
21 April 2005 (21.04.2005)

PCT

(10) International Publication Number  
**WO 2005/036383 A3**

(51) International Patent Classification:  
**G06F 9/445 (2006.01)**

(21) International Application Number:  
**PCT/IB2004/003222**

(22) International Filing Date:  
30 September 2004 (30.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
03292522.4 10 October 2003 (10.10.2003) EP

(71) Applicant (for all designated States except US): **KONINKLUKE PHILIPS ELECTRONICS N.V. [NL/NL]**; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **NEWTON, Philip, Steven [NL/FR]**; Societe Civile SPID, 156 Boulevard Haussmann, F-75008 Paris (FR). **KELLY, Declan, Patrick [IE/FR]**; Societe Civile SPID, 156 boulevard Haussmann, F-75008 Paris (FR).

(74) Agent: **VAN OUDHEUSDEN-PERSET, Laure**; Societe Civile SPID, 156 Boulevard Haussmann, F-75008 Paris (FR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

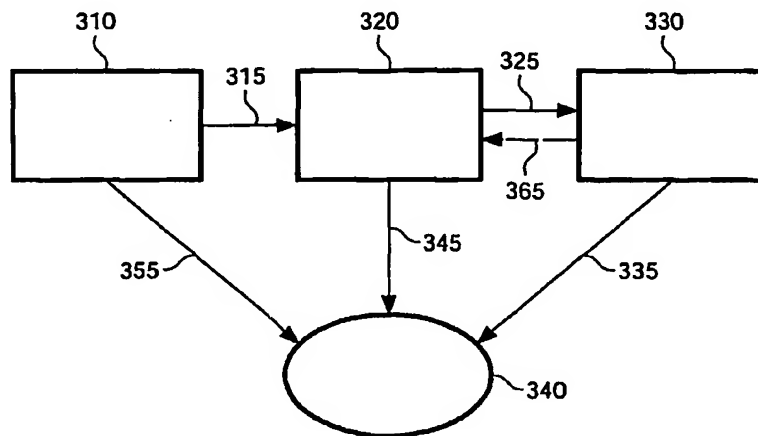
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(U)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

[Continued on next page]

(54) Title: **JAVALIFECYCLE MODEL FOR BD-DISCS**



(57) Abstract: An optical storage carrier is loaded with applications implemented as Java objects that enable interactive services, e.g. gaming, interactive A/V content playback, web browsing. Each Java object includes at least three methods for setting the application in an inactive state, a paused state or an active state. The carrier is also loaded with a loader application that includes a main method. The loader application controls the respective lifecycles of all Java objects present on the carrier and controls the respective methods of the Java objects. The loader application only permits one Java object to run at a time. The lifecycle of the loader application is linked to the disc and the loader application is loaded in memory when the disc is inserted in the device and killed when the disc is removed. The device runs a Java virtual machine on top of which the loader application is configured to run. Since the lifecycle of the loader application is linked to the disc, the Java virtual machine runs for the time the disc is inserted into the device and is not killed when a Java object is either paused or killed.



WO 2005/036383 A3



JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

**Published:**

— with international search report

**(88) Date of publication of the international search report:**

9 March 2006

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*